

3. A male was observed on a road in between two females, about two feet from each. He turned to one female and started sidling up to her, his neck stretched and arched as in display 2, but this time without flapping his wings. When he reached her she flapped her wings a few times and then hopped away. The male then turned to the other female and sidled up to her in exactly the same manner, neck arched but no wing flapping. Both females remained turned away from the male during this display. When the male reached the second female she hopped away, the male following. Then what appeared to be confused fighting broke out between all three birds, and the "fight" was joined by a *Cisticola galactotes* which had been sitting nearby on the road during the display. The interest and aggressiveness on the part of the cisticola may be due to the fact that it is one of the birds parasitised by *Anomalospiza*. After the brief "fighting" all four birds flew off. The birds were silent during this display.

Data based on a series of 14 specimens collected at Embakasi.

Colours of soft parts: Adult males in breeding condition; iris blackish-brown; bill black, merging to flesh-white or pinkish-horn at extreme base of lower mandible; feet pale pinkish-grey to horn-grey. Adult male in non-breeding plumage; iris blackish-brown; bill black, merging to flesh-colour at base of lower mandible; feet horn-grey. Note: in old skins the bill fades from black to horn-colour.

Adult female in breeding condition: iris blackish-brown; bill dark brown on culmen, merging to pale pinkish-horn on cutting edge of upper mandible and on lower mandible; feet pale greyish-horn to horn.

Weights of adults in flesh: Adult males, 21, 20, 19, 20.5, 20, 21, 18 and 19 grammes. Adult females, 20, 19, 21, 20, 19 and 19 grammes.

Breeding: With the exception of a single adult male in fresh, non-breeding dress and with small testes, all specimens were in full breeding plumage and in breeding condition. One adult female had an unshelled egg in the oviduct measuring 16 x 10 mm.

Food: In all specimens the crop and stomach contained grass seeds only; seeds of *Setaria sphacelata* and *Sorghum verticilliflorum* were present in roughly equal quantities. (Det. Miss D. Napper, East African Herbarium).

Skull ossification: Only in one adult male was the skull fully ossified: in all the other adult specimens from 30% to 10% of the frontal area of the skull was unossified. Dr. James P. Chapin ("Birds of the Belgian Congo", vol. 4, p. 407) comments upon this condition of incompletely ossified skulls in *Anomalospiza*. This same condition pertains in the genera *Vidua* and *Hypochoera*, in which it is most unusual to find an adult bird with a completely ossified skull.

Ornithological notes on the Sunda Strait area and the Karimundjawa, Bawean and Kangean Islands

by A. HOGERWERF

Received 26th January, 1962

Birds collected during Captain Cook's last expedition

In 1950 Prof. Stresemann¹ drew attention to the birds collected during Capt. James Cook's last expedition. Among these birds are seven which have been wrongly labelled in the Banksian and Leverian cabinets and

said to have been collected in February, 1780 on Princes Island in the Sunda Strait.

They are *Dissemurus paradiseus tropicus* (Gmelin) = *D. paradiseus formosus* Cabanis; *Brachypodius atriceps* (Temm.); *Orthotomus borealis* (Gmelin) = *O. sepium* Horsfield; *Butastur indicus* (Gmelin); *Haliaeetus leucogaster* (Gmelin); *Streptopelia chinensis tigrina* (Temm.) and *Treron curvirostra* (Gmelin).

The consequences of this are quite important as is evident from Prof. Stresemann's proposals on pp. 82 and 86 of his paper and I give my opinion because of a fairly extensive knowledge of Princes Island's birds. I do this after some hesitation, for I have the greatest admiration for Prof. Stresemann's efforts to find out the correct localities of these birds, at that time quite new to science, but one should not remain silent, for it is possible that on other points also, Prof. Stresemann's investigations have led to wrong conclusions, particularly in cases where it was or is impossible to examine original skins and conclusions had to be based on descriptions or drawings.

Prof. Stresemann, in a letter to me in April, 1956, encouraged me to publish my objections.

Among the species mentioned there are three whose occurrence on Princes Island may be strongly doubted. They are *Dissemurus paradiseus*, *Streptopelia chinensis* and *Treron curvirostra*, all large and conspicuous birds. I could not find any of these after five weeks of intensive collecting and observation on the island² and during many visits before and after that expedition between 1937 and 1955, even though I am very well acquainted with the habitat and voice of these and nearly all other birds living in and around the Sunda Strait, an area which I visited regularly during some fifteen years and many times for several weeks at a stretch. There are no indications that conditions on Princes Island have changed sufficiently to cause important alterations in the plant and animal life since Cook's last expedition. This island was always, so far as can be determined from the written history, very sparsely populated and completely uninhabited since the eruption of Krakatau³ in 1883 killed a number of wood-cutters who occupied a small settlement.

But only some lower parts of this mountainous island were seriously damaged by that eruption and today nearly the whole island is covered by heavy primary forest which gives the impression of having been untouched by man for a very long period; also there are indications that Princes Island contains a very old fauna.

Water is rather scarce on the island and this may have prevented people clearing it, but the most probable explanation is that the area is a very sparsely populated part of Java where there is no scarcity of arable land. In November, 1921 the area was set aside as a natural reserve.

It cannot be excluded that human settlements along the coast in former times created a suitable habitat for *Streptopelia chinensis*, though this dove is by no means a lover of small islands, unlike *Streptopelia bitorquata* which is a typical resident on many islands around Java. One dead specimen of this latter species was found by me on the beach of Princes Island.

For the reasons stated the presence of *S. chinensis* here at the relevant time seems improbable and that *Dissemurus paradiseus* and *Treron curvirostra* should have been collected here may be considered almost

impossible. The well known "island drongo" *Dicrurus hottentottus* is of rather common occurrence on Princes Island and on other small islands of the Indonesian Archipelago, but *Dissemurus* is not to be expected in such places.

Together with these birds Prof. Stresemann mentions *Haliaeetus leucogaster*, *Butastur indicus*, *Pycnonotus atriceps* and *Orthotomus sepium*. With the exception of *Butastur indicus*, an extremely rare migrant to Java and the surrounding area which I myself never saw alive, these species are known to occur on Princes Island, but the same can be said of nearly all other small islands in the neighbourhood of Java and of Sumatra, as well as Java itself, so that there is no reliable indication that Princes Island was the locality where Cook's expedition obtained the seven birds. Cook's ships may have anchored between Java and Sumatra and some or most of the birds could have been collected on Java's most western peninsula Ujung Kulon (where ships often anchored at that time in order to fetch drinking water), where *Dissemurus paradiseus* is rather common and where *Streptopelia chinensis* also lives⁴, but not *Treron curvirostra*. This last species might have been collected on Trouwers or Klapper Island, situated in the Indian Ocean, some miles south of Western Java, which were passed by Cook's ships before they entered the Strait of Sunda. On both these last islands *Treron curvirostra* is rather common and I myself collected ten specimens in some days, though the conditions on those islands which are covered with very heavy forest were extremely difficult. In a following paper I hope to draw special attention to this remarkable pigeon from both these islands.

I cannot therefore agree with Prof. Stresemann's conclusions, not even when it concerns species which are known from Princes Island, until we succeed in laying hands on those old skins, and I did not find *Orthotomus sepium* in which I am particularly interested. There is also a possibility that *Dicrurus hottentottus* and *Treron vernans* were obtained on the island instead of *Dissemurus paradiseus* and *Treron curvirostra* but while there is no proof it seems to me better not to speculate and not to change the localities of origin of the birds discussed above. Even if we succeed in comparing those old skins—obtained nearly 200 years ago—we cannot be optimistic about the results.

Orthotomus sepium

Comparing a good series of *Orthotomus sepium*, collected by me on Princes Island, with birds from Java itself, it became evident that both populations cannot be united into the same subspecies. I think it better not to propose a new name for the birds living on Java, considered until now as the type locality of the nominate race of that Tailor Bird, but to describe as new the population living on Princes Island.

During several collecting trips between 1950 and 1957 to Java's most western peninsula Ujung Kulon, the islands in and around the Strait of Sunda and in the Java Sea, special attention was paid to these small birds which led to very interesting results. Moreover I could study nearly 20 fresh skins collected in the neighbourhood of Bogor (West Java) by the collectors of the Zoological Museum of the Botanical Gardens.

Compared with twelve males from Ujung Kulon, the thirteen skins originating from Princes Island differ by their larger size and by the somewhat lighter grey on the throat.

When comparing the eight females from this island with four females from Ujung Kulon and eight from Bogor, I cannot see much difference, but females originating from both first mentioned localities average less black on throat and foreneck.

On the upper parts, birds from Princes Island differ from those coming from both other localities. They are less green, duller in tone than skins originating from more eastern regions whereas the ferruginous tint on the pileum and sides of the head averages less clear, being much duller which is perhaps also the case with the feathering on the tibia.

Of the smaller islands in and around the Sunda Strait, Princes Island is the only locality besides Ujung Kulon where we found pure representatives of the "olive-greenish group" of this Tailor Bird, in 1821 described by Horsfield as *Orthotomus sepium*.



Orthotomus sepium subsp.

1. Male and female of *Orthotomus s. sepium* (♂ from Ujung Kulon, ♀ from Bogor)
2. Male and female of *Orthotomus sepium sundaicus* subsp. nov. ♂ ♀ from Princes Island

Though *Orthotomus sepium* from Java's most western peninsula averages darker below than skins from more eastern localities (e.g. Bogor), there seems no reason to separate it because it nearly exactly agrees in size and all other respects. But the difference in plumage and the outstanding difference in size between representatives of both these populations and birds from Princes Island, justify separation of this last population for which I propose the name

Orthotomus sepium sundaicus subsp. nov.

*Types**: ♂ Mus. Zoöl. Bogor, No. 20.952, 24th September, 1951, Legon Lintah, Princes Island, West Java; leg. A. Hoogerwerf.

♀ Mus. Zoöl. Bogor, No. 20.944, 12th September, 1951, Tjikan-tjana, Princes Island, West Java; leg. A. Hoogerwerf.

Range: All over the island; also in the coastal areas but perhaps not in the mangrove-forests.

♂♀ Wings considerably larger than in the typical subspecies, known from Java. Tail much longer, most conspicuous in the males. Bill a trifle shorter than in *sepium*.

On the anterior under parts of the males the new subspecies averages lighter because the grey tint on the throat and foreneck is not so dark as in many birds of the nominate race, whereas the light area on the remaining under parts averages somewhat larger in *sundaicus* and is less washed with yellow.

On the under parts the females are rather similar to *sepium* but they are lighter and less greyish.

The upper parts of both sexes average a trifle duller olive, whereas the ferruginous tint on the pileum and sides of the head averages duller too, as is perhaps also the case on the tibia.

Males from Ujung Kulon seem in plumage somewhat intermediate between Princes Island's population and the birds of the nominate race coming from more eastern localities on Java; they nearly resemble (much larger) *sundaicus* in colour but agree in size with *sepium* and the females seem to average lighter on the throat and foreneck than birds from Princes Island or of *sepium*.

The subspecies *sepium* and *sundiacus* differ in fresh as well as in old skins from *ruficeps* from Java and Sumatra, from *baeus*†, *concinus*, *ochrommatus*† from the islands off Sumatra's west coast, *palliatus* from Karimundjawa and *borneonensis* from Borneo because of the olive instead of ashy-grey upper parts and the olive and yellow wash on the under surface in both sexes.

When studying the colour differences of the plumage, special attention was paid to birds whose gonads reached about the same state of development.

Measurements‡:

♂♂ *Wing*: *sepium* (Java): 44, 45, 45, 45, 45, 45, 45, 47, 47, 47, 47, 47, 48, 49; *sepium* (Ujung Kulon): 44, 44, 46, 46, 46, 46, 46, 46, 47, 47, 48; *sundaicus*: 48, 49, 49, 49, 49, 49, 50, 50, 50, 51, 52.

Tail: *sepium* (Java): 38, 39, 40, 41, 41, 41, 41, 41, 42, 42, 42, 42, 44; *sepium* (Ujung Kulon): 37, 38, 39, 40, 40, 40, 40, 41, 43, 44; *sundaicus*: 45, 46, 46, 46, 47, 47, 47, 48, 49, 49.

Culmen: *sepium* (Java): 13, 13.1, 13.5, 14, 14, 14, 14, 14.1, 14.1, 14.2, 14.5, 14.9, 15; *sepium* (Ujung Kulon): 12.3, 13, 13.5, 13.5, 13.8, 14, 14, 14.1, 14.3, 14.5, 14.8; *sundaicus*: 12.8, 12.9, 13, 13, 13, 13.3, 13.5, 13.8, 13.9, 14, 15, 15.

* All types mentioned in this paper are in the Zoological Museum at Bogor (Indonesia) and paratypes in Leyden Museum for Natural History (Holland).

† The subsp. *baeus* and *ochrommatus* are considered as synonyms of *ruficeps* by Dillon Ripley (*Bull. Mus. Comp. Zoöl.*, 94, 1944, p. 394).

‡ All measurements published in this paper are in mm.

Max. min. and average measurements:

	<i>sepium</i> (Java)	<i>sepium</i> (Udj. Kulon)	<i>sundaicus</i>
<i>Wing:</i>	44-49	44-48	48-52
	<hr/> 46.14	<hr/> 46	<hr/> 49.58
<i>Tail:</i>	38-44	37-44	45-49
	<hr/> 41.08	<hr/> 40.20	<hr/> 47.18
<i>Culmen:</i>	13-15	12.3-14.8	12.8-15
	<hr/> 14.03	<hr/> 13.80	<hr/> 13.60

♀ *Wing: sepium* (Java): 42, 43, 43, 43, 43, 43, 44, 44, 44, 45, 45, 46, 46;
sepium (Udjung Kulon): 42, 44, 44, 45; *sundaicus*: 46, 46, 47, 47, 48, 48, 49;

Tail; sepium (Java): 34, 35, 35, 35, 36, 36, 36, 36, 36, 39, 40, 40, 41;
sepium (Udjung Kulon): 35, 36, 37; *sundaicus*: 38, 39, 39, 40, 40, 42, 42;

Culmen; sepium (Java): 12.5, 12.6, 13, 13, 13, 13.1, 13.2, 13.2, 13.5, 14.1, 14.2, 14.2, 15; *sepium* (Udjung Kulon): 12.7, 13.2, 13.3, 14.9; *sundaicus*: 13, 13.1, 13.2, 13.9, 14.2, 15.

Max., min. and average measurements:

	<i>sepium</i> (Java)	<i>sepium</i> (Udj. Kulon)	<i>sundaicus</i>
<i>Wing:</i>	42-46	42-45	46-49
	<hr/> 43.92	<hr/> 43.75	<hr/> 47.29
<i>Tail:</i>	34-41	35-37	38-42
	<hr/> 36.85	<hr/> 36	<hr/> 40
<i>Culmen:</i>	12.5-15	12.7-14.9	13-15
	<hr/> 13.43	<hr/> 13.70	<hr/> 13.73

References §

- ¹ Stresemann, Erwin, Birds collected during Capt. James Cook's last expedition, *The Auk*, 67, January 1950, pp. 66-88.
- ² Hoogerwerf, A. Some notes about the Nature Reserve Pulau Panaitan (Prinseneiland) in Strait Sunda, with special reference to the avifauna, *Treubia*, 21, February, 1953, pp. 481-505.
- ³ Hoogerwerf, A. Notes on the Vertebrate Fauna of the Krakatau Islands, with special reference to the birds, *Treubia*, 22, November, 1953, pp. 319-348.
- ⁴ Hoogerwerf, A. Contribution to the knowledge of the distribution of birds on the island of Java, with remarks on some new birds, *Treubia*, 19, May, 1948, pp. 83-137.

Further notes on the Ashy Tailor Bird, formerly known as *Orthotomus ruficeps* (Lesson) and *Orthotomus cineraceus* Blyth.

All (about 70) skins of this Tailor Bird at present in the collections of the Zoological Museum at Bogor, recently collected by me in the Karimundjawa and Kangean Archipelago, on Bawean Island and on the islands Sebesi, Sebuku and Legundi (south of Sumatra) differ from the (20)

§ Too much literature was studied when preparing this paper to be quoted below in extenso, so that only the articles directly referred to in the text will be mentioned.